

# **FIVE-YEAR REVIEW REPORT**

## **Five-Year Review Report**

**for**

**Conrail Rail Yard**

**City of Elkhart**

**Elkhart County, Indiana**

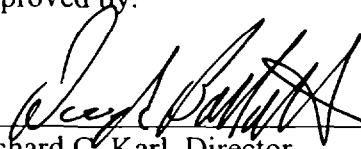
**September 2004**

**PREPARED BY:**

**U.S. EPA REGION 5  
Chicago, Illinois**

Approved by:

Date:

*for*   
Richard C. Karl, Director  
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*9/27/04*

# Five-Year Review Report

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List of Acronyms  
(In Order of Appearance)

<u>NAME OR TERM</u>	<u>ACRONYM</u>
United States	U.S.
Environmental Protection Agency	EPA
Remedial Action Objectives	RAOs
Record of Decision	ROD
Operation and Maintenance	O&M
Comprehensive Environmental Response, Compensation and Liability Act (Superfund)	CERCLA
National Contingency Plan	NCP
Potentially Responsible Parties	PRPs
Indiana Department of Environmental Management	IDEM
Remedial Design/Remedial Action	RD/RA
Trichloroethylene	TCE
Remedial Investigation/Feasibility Study	RI/FS
Unilateral Administrative Order	UAO
Consent Decree	CD
Technical Impracticability	TI
Applicable and Relevant or Appropriate Standards	ARARs
Dense Non-Aqueous Phase Liquids	DNAPLs
National Priorities List	NPL

## Executive Summary

This report documents the Second Five-Year Review for the Conrail Rail Yard Site in Elkhart, Indiana (the Site). In June 2004, the remedial action for the Site was completed. Portions of the Site remedy have been in place for several years; however, construction of the ground water containment system on the Rail Yard and the ground water extraction and treatment system at the Osceola Drag Strip was recently completed and is in the "startup and shakedown" phase. The findings of this Five-Year Review indicate that the Conrail Rail Yard Site remedy continues to be protective of human health and the environment. The next Five-Year Review is due in September 2009.

### Five-Year Review Summary Form

SITE IDENTIFICATION		
Site name (from WasteLAN): Conrail Rail Yard		
EPA ID (from WasteLAN): IND000715490		
Region: 5	State: IN	City/County: Elkhart/Elkhart
SITE STATUS		
NPL status: <input checked="" type="checkbox"/> Final <input type="checkbox"/> Deleted <input type="checkbox"/> Other (specify) _____		
Remediation status (choose all that apply): <input type="checkbox"/> Under Construction <input checked="" type="checkbox"/> Operating <input type="checkbox"/> Complete		
Multiple OUs?* <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Construction completion date: PCOR 07/12/04	
Has site been put into reuse? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO Note: This is an operating rail yard.		
REVIEW STATUS		
Lead agency: <input checked="" type="checkbox"/> EPA <input type="checkbox"/> State <input type="checkbox"/> Tribe <input type="checkbox"/> Other Federal Agency _____		
Author name: Brad Bradley		
Author title: Remedial Project Manager	Author affiliation: U.S. EPA Region 5	
Review period: 06/2004 to 09/23/2004		
Date(s) of site inspections: June 7, 2004; June 28, 2004; and September 16, 2004		
Type of review: <input checked="" type="checkbox"/> Post-SARA <input type="checkbox"/> Pre-SARA <input type="checkbox"/> NPL-Removal only <input type="checkbox"/> Non-NPL Remedial Action Site <input type="checkbox"/> NPL State/Tribe-lead <input type="checkbox"/> Regional Discretion		

<b>Review number:</b> <input type="checkbox"/> 1 (first) <input checked="" type="checkbox"/> 2 (second) <input type="checkbox"/> 3 (third) <input type="checkbox"/> Other (specify)	
<b>Triggering action:</b> <input type="checkbox"/> Actual RA Onsite Construction at OU #1 <input type="checkbox"/> Actual RA Start at OU# _____ <input type="checkbox"/> Construction Completion <input checked="" type="checkbox"/> Previous Five-Year Review Report <input type="checkbox"/> Other (specify) _____	
<b>Triggering action date (from WasteLAN):</b> 09/23/1999	
<b>Due date (five years after triggering action date):</b> 09/23/2004	

\* ["OU" refers to operable unit.]

### Issues:

There are no current contamination issues related to the Site; however, the ground water containment system at the Rail Yard and the ground water extraction and treatment system at the Osceola Drag Strip have just recently been completed and are in the "startup and shakedown" phase. The United States (U.S.) Environmental Protection Agency (EPA) will continue to monitor these systems, in terms of effectiveness of containment of ground water contamination and the extent to which natural attenuation of the dissolved portion of the contaminant plumes achieves the Remedial Action Objectives (RAOs) (for the rail yard), and the extent to which the extraction and treatment system achieves RAOs (for the Osceola Drag Strip) for the Site. Institutional Controls for the Site have not yet been put into place; however, it is anticipated that these measures will be in place by the summer of 2005. EPA will work with the PRPs to ensure that this happens.

### Recommendations and Follow-up Actions:

EPA will continue to review the monitoring data for the containment system, the dissolved portion of the contaminant plumes, and the extraction and treatment system.

### Protectiveness Statement(s):

The remedy at the Conrail Rail Yard Site is protective of human health and the environment because the final remedy has been implemented and all relevant monitoring data indicate that the remedy continues to be protective. EPA will need to continue to monitor the ground water containment system at the rail yard and the extraction and treatment system at the Osceola Drag Strip to ensure that the ground water source areas on the rail yard are being effectively contained, and that monitored natural attenuation in the dissolved portion of the contaminant plumes and the extraction and treatment system are effectively reducing contaminant concentrations such that the RAOs for the Site will be achieved in a reasonable time frame.

**Other Comments:** None.

# Five-Year Review Report

## I. Introduction

The Conrail Rail Yard Site in Elkhart, Indiana (the Site) is an operating rail yard that began operations in 1956. The remedy for the Site was implemented from September 1994 through June 2004 pursuant to a June 1991 Interim Record of Decision (ROD), a September 9, 1994 Final ROD, and a September 27, 2000 ROD Amendment issued by the United States Environmental Protection Agency (EPA).

Since the remedy for the Site was completed in June 2004, the Operation and Maintenance (O&M) Program for the entire remedy has not yet been implemented. Monitoring of ground water and performance monitoring of vapor abatement units has been ongoing.

### The Purpose of the Review

The purpose of five-year reviews is to determine whether the remedy at a site continues to be protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in Five-Year Review reports. In addition, Five-Year Review reports identify issues found during the review, if any, and recommendations to address them.

### Authority for Conducting the Five-Year Review

EPA is preparing this five-year review pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121 and the National Contingency Plan (NCP). CERCLA Section 121 states:

*If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented. In addition, if upon such review it is the judgement of the President that action is appropriate at such site in accordance with section 104 or 106, the President shall take or require such action. The President shall report to the Congress a list of facilities for which such review is required, the results of all such reviews, and any actions taken as a result of such reviews.*

EPA interpreted this requirement further in the NCP; 40 Code of Federal Regulations Section 300.430(f)(4)(ii) states:

*If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for the unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.*

#### Who Conducted the Five-Year Review

EPA conducted this five-year review. The Potentially Responsible Parties (PRPs), through their contractor, URS Corporation, conducted all of the vapor sampling and ground water monitoring that is discussed in this five-year review. The EPA Remedial Project Manager and Indiana Department of Environmental Management (IDEM) Site Manager visited the site to ensure that the ground water extraction and treatment systems were operating properly. EPA completed the review based on this information.

#### Other Review Characteristics

This is the second five-year review for the Conrail Site. The triggering action for this review is the previous five-year review. This review is being conducted 1) because the ground water remedy allowed hazardous substances to be left on site above levels that allow for unlimited use and unrestricted exposure and 2) to ensure that the operating ground water systems, the vapor abatement units and the alternate water supply, continue to be effective in eliminating human exposure to the contaminants at the Site.

## **II. Site Chronology**

The site chronology is tabularized below:

<u>Event</u>	<u>Date</u>
National Priorities List Listing	8/30/89
Interim Remedial Investigation/Feasibility Study complete	6/28/91
Interim Record of Decision signature	6/28/91
EPA issued Unilateral Order to PRPs for Interim Action	7/7/92
Interim Remedial Design (RD) Start	8/16/92
Interim RD Complete	6/2/94

Interim Remedial Action (RA) Start	8/29/94
Final Remedial Investigation/Feasibility Study complete	9/9/94
Final Record of Decision signature	9/9/94
EPA issued Unilateral Order to PRPs for portion of Final RA	5/15/95
Final RD Start	6/14/95
Interim RA Complete	6/16/97
First Five-Year Review	9/23/99
ROD Amendment signature	9/27/00
Final RD Complete	5/29/03
Final RA Start	5/29/03
Final RA Complete	6/28/04
Preliminary Close-out Report	7/12/04

### **III. Background**

#### **Physical Characteristics**

The Conrail Rail Yard Site is located adjacent to and within the southwestern city limits of Elkhart, Indiana (See Figure 1). The Site occupies 675 acres, and the study area, which includes the rail yard, encompasses roughly 2500 acres. The rail yard is an electronically controlled hump yard which serves as a classification distribution yard for freight cars. The rail yard began operations in 1956 as part of the New York Central Railroad, and continued operations as a subsidiary of the Penn Central Transportation Company until 1976. From 1976 to 1999, Conrail operated the rail yard. In 1999, Norfolk Southern Corporation took over operation of the rail yard.

#### **Land and Resource Use**

The St. Joseph River flows westward and is located a little over a mile north of the Site. Baugo Bay flows north into the St. Joseph River, and is located immediately to the west of the study area. Crawford Ditch originates at the Site and flows intermittently to the St. Joseph River.

There are several light industries surrounding the study area to the north and northwest of the rail yard, as well as the numerous light industries surrounding the study area to the east and south. Approximately 3500 people live within the study area, within about a mile and a half of the Site. Prior to remedial activities, about 3000 people used private residential wells for their water supply.

### **History of Contamination**

From 1961 to 1968, there were a number of citizen complaints with regard to oil discharges from local authorities. Between 1966 and 1969 a tank car containing carbon tetrachloride collided with another car during humping operations at the rail yard causing the release of approximately 16,000 gallons of carbon tetrachloride. In 1976, operations at the rail yard were transferred to the Consolidated Rail Corporation (Conrail). From 1976 to the present, spills and releases of oil, diesel fuel, hydrochloric acid, caustic soda, and various petroleum-related substances have occurred there. Reports also indicate that a track cleaning substance and engine degreasers were used and disposed of at the rail yard.

Site activities resulted in contamination of the Site and surrounding areas in four ways: the ground water was contaminated with carbon tetrachloride and trichloroethylene (TCE) from the tank car spill, other spills, and degreasing operations, resulting in two distinct contaminant plumes, one of which contained carbon tetrachloride and TCE levels over 5000 parts per million each; the St. Joseph River was contaminated by the ground water flowing into it; some residential basements were contaminated with vapors emanating from the contaminated ground water; and rail yard soils were contaminated by the various spills that occurred on the rail yard.

### **Initial Response, Interim Response, and Final Response**

In 1986, after testing of a private well indicated levels of TCE and carbon tetrachloride up to 1000 times their respective Maximum Contaminant Levels, EPA provided bottled water to residents in this area. Shortly thereafter, IDEM provided area residents with whole house and point-of-use filters.

Due to Conrail's unwillingness to perform a complete investigation, EPA conducted the Remedial Investigations and the Feasibility Studies (RI/FSS) for the Site. EPA issued an Interim Record of Decision in June 1991 and a final Record of Decision for the Site on September 9, 1994. After negotiations for the Interim Remedial Design(RD)/Remedial Action (RA) Consent Decree broke down, EPA issued a Unilateral Administrative Order (UAO) to Conrail and Penn Central (the PRPs) on July 7, 1992 to perform hookups of residences and businesses to an alternate water supply within the boundaries of the two contaminant plumes (See Figure 1). EPA issued a second UAO on May 15, 1995 to Conrail and Penn Central to hook up the remainder of homes and businesses within the study area to the alternate water supply (this was only a portion of the Final ROD). On August 2, 1996, the United States lodged a Partial Consent Decree for recovery of funds expended on the RI/FS, and on November 10, 1997, an RD/RA Consent

Decree (CD) with Conrail and Penn Central was entered, encompassing the remainder of work to be performed under the final Record of Decision.

The Interim Remedial Action started on August 29, 1994 and was completed on June 16, 1997. The hookup of the remaining residences to the alternate water supply, performed under the May 15, 1995 UAO, was also completed on June 16, 1997<sup>1</sup>. During the Remedial Design (RD) for the remainder of the remedy required under the Final ROD, the PRPs submitted a petition for a technical impracticability (TI) waiver to EPA for consideration. The TI waiver petition requested that Applicable and Relevant or Appropriate Requirements (ARARs) be waived for the two Dense Non-Aqueous Phase Liquid (DNAPL) ground water source areas on the rail yard and that the dissolved portions of the ground water contaminant plumes be addressed via natural gradient flushing. The November 10, 1997 CD contained a provision that, if EPA were to grant a TI Waiver to the PRPs, that the PRPs must address any other sources of ground water contamination in the site area that would extend the period of time required for RAOs to be achieved via natural gradient flushing. The CD also indicated that if EPA grants a TI Waiver, it must do so via a ROD Amendment. During RD, the PRPs identified another source of ground water contamination within the County Road 1 plume (See Figure 1) that would likely extend the time needed for RAOs to be achieved via natural gradient flushing. This source is located on the Osceola Drag Strip property, and contributes substantial amounts of carbon tetrachloride to the County Road 1 plume. EPA granted the TI Waiver via the execution of a ROD Amendment on September 27, 2000, and the PRPs were required to address the carbon tetrachloride contamination on the Osceola Drag Strip.

Also during RD, carbon tetrachloride vapor intrusion was identified in nine residences at levels that exceeded the site-specific health-based concentration. These residences were all located directly downgradient from the Osceola Drag Strip. The RA for the remainder of the Final ROD was completed on June 28, 2004.

### **Basis for Taking Action**

The primary exposure pathway for humans identified during the Remedial Investigations/Feasibility Studies for the Site was ingestion of ground water contaminated by TCE and carbon tetrachloride. A secondary exposure pathway identified was inhalation of vapors from indoor uses of contaminated ground water, such as showering and cooking. During RD, a third exposure pathway was identified, inhalation of carbon tetrachloride vapors in indoor air in a small area of the Site bounded by Vistula Road, Ash Road, and Lehman Street (See Figure 1). Potential ecological risks were identified in the RI/FSs by solvents entering the St. Joseph River via the Site ground water contaminant plumes; however, several years of data from

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<sup>1</sup>Two residences with contaminated ground water exceeding applicable standards, 56675 Spring Ave and 56803 Southgate, were not hooked up to the alternate water supply due to refusal of access. These two residences utilize whole house carbon filtration systems and are monitored annually.

post-RI/FS benthic macroinvertebrate studies indicate that the site contamination does not pose any measurable ecological risks.

## **IV. Remedial Actions**

### **Remedy Selection**

The Interim Remedial Action selected for the Site in the June 28, 1991 ROD included hooking up approximately 450 residences to an alternate water supply and extraction and treatment of the County Road 1 contaminant plume. The Final Remedial Action, described in the September 9, 1994 ROD, included hooking up the remainder of residences in the study area (approximately 650) to the alternate water supply; extraction, treatment, and discharge of contaminated ground water, focusing on “hot spots”; investigation, and if necessary, remediation of solvent vapors in residences resulting from site contamination; air sparging of the deeper, DNAPL contamination areas on the rail yard; excavation of contaminated soils from a small area on the rail yard; and deed restrictions to protect the operating ground water extraction and treatment system. The September 27, 2000 ROD Amendment replaced the extraction and treatment remedy and the air sparging remedy with a hydraulic containment system for the DNAPL source areas on the rail yard, natural gradient flushing of the dissolved portions of the contaminant plumes, and active remediation of the carbon tetrachloride contamination on the Osceola Drag Strip, with the extraction and treatment remedy retained as a contingency remedy.

### **Remedy Implementation**

After negotiations for the Interim Remedial Design/Remedial Action Consent Decree broke down, EPA issued a UAO to Conrail and Penn Central (the PRPs) on July 7, 1992 to perform hookups of residences and businesses to an alternate water supply within the boundaries of the two contaminant plumes (See Figure 1). EPA issued a second UAO on May 15, 1995 to Conrail and Penn Central to hook up the remainder of homes and businesses within the study area to the alternate water supply. On November 10, 1997, an RD/RA CD with Conrail and Penn Central was entered, encompassing the remainder of work to be performed under the final ROD.

The Interim Remedial Action started on August 29, 1994 and was completed on June 16, 1997. The hookup of the remaining residences to the alternate water supply, performed under the May 15, 1995 UAO, was also completed on June 16, 1997. During the RD for the remainder of the remedy required under the Final ROD, the PRPs submitted a petition for a TI waiver to EPA for consideration. EPA granted the TI Waiver via the execution of a ROD Amendment on September 27, 2000, and, as required by the CD, the PRPs were required to address the carbon tetrachloride contamination on the Osceola Drag Strip.

Also during RD, carbon tetrachloride vapor intrusion was identified in nine residences at levels that exceeded the site-specific health-based concentration. Between 2000 and 2002, these nine residences were provided with vapor abatement units. Despite the collection of numerous

samples, the area on the rail yard targeted for soil removal could not be relocated; thus, no soil remediation was required on the rail yard. The RA for the remainder of the Final ROD was completed on June 28, 2004. A preliminary close out report for the Site was issued on July 12, 2004.

The institutional controls required by the Final ROD and ROD Amendment have not yet been put into place. A schedule will be developed with the PRPs to ensure that the institutional controls are put into place by summer 2005. These institutional controls will ensure that the operating ground water containment system and ground water extraction and treatment system on the rail yard and Osceola Drag Strip, respectively, are protected from damage until the ground water RAOs have been met for the Site. Since the Site is currently an operating rail yard, reuse is not applicable. Due to the fact that ground water contamination was left in place, ground water monitoring must be conducted. Given that the monitoring programs will continue for a minimum of 30 years, the Conrail Site will not be deleted from the National Priorities List (NPL) for a number of years.

## **V. Progress Since the Last Review**

The first five-year review for the Site was conducted during the design and construction of the Final Remedy. Since that time, vapor abatement units were installed to address carbon tetrachloride vapor intrusion in nine homes, and the ground water containment system on the rail yard and the ground water extraction and treatment system on the Osceola Drag Strip have been designed and constructed and are currently operational, as per the 2000 ROD Amendment.

## **VI. Five-Year Review Process**

### **Administrative Components**

IDEM was notified of the five-year review and notice was published in the local newspaper in July 2004. The completed five-year review report will be placed in the site information repository, and notice of completion of the five-year review will be published in the local newspaper.

### **Community Involvement /Interviews**

EPA published notice of the five-year review in the local newspaper in July 2004, and EPA attended a public meeting on August 3, 2004 and solicited input from the attendees regarding the five-year review. No one has raised any concerns, either verbally or in writing, regarding the five-year review for the Site. No interviews were conducted.

## **Document and Data Review**

The list of documents and data reviewed in preparing for this Five-Year Review Report is listed in the attachment entitled "List of Documents Reviewed".

## **Site Inspection**

EPA performed a site inspection on June 7, 2004, and EPA and IDEM representatives physically inspected the Site and the operating systems on June 28, 2004, as part of the Pre-Final Inspection for the Site. EPA inspected the site on an additional occasion in conjunction with the five-year review, on September 16, 2004. The inspection involved observations of the operating systems, which were acceptable. Annual performance monitoring data collected by URS Corporation indicates that the vapor abatement systems are operating properly.

## **VII. Technical Assessment**

**Question A: Is the remedy functioning as intended by the decision documents? Yes.**

### Remedial Action Performance

The primary human exposure pathway at the Site was ingestion of contaminated drinking water from private wells, and the secondary exposure pathway was inhalation of solvent vapors from indoor uses of contaminated water. The provision of an alternate water supply has eliminated both of these exposure pathways. The third human exposure pathway was the inhalation of indoor carbon tetrachloride vapors that migrate into homes from contaminated ground water. The provision of vapor abatement units in the nine homes where the site-specific action level was exceeded has addressed this exposure pathway. The vapor abatement units are all performing as designed, and annual monitoring of additional homes in the vicinity of the nine homes has indicated that no additional homes require vapor abatement units at this time.

In summary, the data gathered during routine monitoring at the Site indicate that the remedy continues to function as designed, is performing as expected, and that the containment of contaminants is effective.

### System Operation and Maintenance

The remedy for the Site includes nine vapor abatement units, a ground water containment system at the rail yard, and a ground water extraction and treatment system at the Osceola Drag Strip. Per the annual performance monitoring data, the vapor abatement units are operating as designed and reducing the carbon tetrachloride vapor levels in the nine homes to below the level of concern, and in most cases, below the analytical method detection limits. The ground water systems were just finished in late June 2004 and are still in the "startup and shakedown" phase; however, preliminary data indicate the both systems are providing adequate drawdown and are

performing as expected with respect to reducing ground water contaminant levels and minimizing solvent air emissions from the air stripping processes.

#### Opportunities for Optimization

Since the operating ground water systems at the Site were just recently completed and became operational, opportunities for optimization of O&M have not yet been analyzed. The vapor abatement systems are operating effectively, and the annual performance monitoring has been used for troubleshooting and optimizing the vapor abatement units.

#### Early Indicators of Potential Issues

Since the construction of the ground water systems was recently completed, there are no early indicators of potential issues at this time. No issues have arisen with respect to the performance of the vapor abatement units. EPA will continue to monitor the performance of the ground water systems and vapor abatement units until the RAOs for the Site have been met.

#### Implementation of Institutional Controls and Other Measures

Institutional Controls for the Site have not yet been put into place; however, it is anticipated that these measures will be in place by the summer of 2005. EPA will work with the PRPs to ensure that this happens.

**Question B: Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives used at the time of the remedy still valid?   Yes.**

#### Changes in Standards and To Be Considered Criteria

There have been no changes in standards or To Be Considered criteria since the start of remedial construction at the Site.

#### Changes in Exposure Pathways

There have been no changes in the potential exposure pathways at the Site since the implementation of the remedy for the Site. There have been no land use changes at the Site. Since the Site is an operating rail yard, no plans have been discussed for reuse of the Site.

#### Changes in Toxicity and Other Contaminant Characteristics

Neither the toxicity factors for the contaminants of concern nor other contaminant characteristics have changed in a way that could affect the protectiveness of the remedy. EPA will continue to review the ground water monitoring data to track the relative percentages of the breakdown products of TCE and carbon tetrachloride. Some of the breakdown products of TCE, such as

vinyl chloride, are more toxic than TCE; however, significant breakdown of TCE has not been detected to date.

#### Changes in Risk Assessment Methods

Standardized risk assessment methods have not changed in a way that could affect the protectiveness of the remedy.

#### Expected Progress Toward Meeting Remedial Action Objectives

The remedy for the Site is progressing as expected. Remedial Action Objectives have either been met (provision of alternate water supply to 1150 residences and vapor abatement units in nine homes) or are progressing in a manner that is acceptable and is expected to result in the Remedial Action Objectives being met within a reasonable time frame (ground water systems), and the monitoring programs will continue to ensure that any changes in contaminant levels or the performance of the operating systems will be detected and addressed, if necessary.

**Question C: Has any other information come to light that could call into question the protectiveness of the remedy? No.**

There have been no newly identified ecological risks, impacts from natural disasters, or any other information that has been identified that could affect the protectiveness of the remedy for the Site.

### **VIII. Issues**

<b>Issue</b>	<b>Currently Affects Protectiveness (Y/N)</b>	<b>Affects Future Protectiveness (Y/N)</b>
Placement of institutional controls	N	Y

Based on the Monitoring Report and physical observations made during the inspections of the Site, there are no issues that currently affect the protectiveness of the remedy outlined in the ROD, but the fact that the ground water systems are still in the "startup and shakedown phase" does not allow EPA to accurately assess the performance of these systems at this time. EPA will continue to monitor the performance of these systems, as well as the vapor abatement units.

## **IX. Recommendations and Follow-up Actions**

<b>Issue</b>	<b>Recommendations/Follow-up actions</b>	<b>Party Responsible</b>	<b>Oversight Agency</b>	<b>Milestone Date</b>	<b>Affects Protectiveness (Y/N)</b>
Institutional Controls	Need to be implemented	PRPs	EPA	summer 2005	N-current Y-future

EPA will work with the PRPs to make sure that the required institutional controls are put into place so that the ground water systems will be protected from potential damage.

## **X. Protectiveness Statement**

The remedy at the Conrail Site is protective of human health and the environment because the final remedy has been fully implemented, and the annual sampling and performance monitoring data indicate that the remedy continues to be effective in addressing the exposure pathways that were identified at the Site. EPA will continue to monitor the operating ground water systems, which were completed in June 2004 and are currently in the "startup and shakedown" phase.

## **XI. Next Review**

The sampling activities for the next five-year review for the Conrail Site will be performed in late 2008 to early 2009, with the Third Five-Year Review Report due five years from the date of signature of this Five-Year Review Report (September 2009).

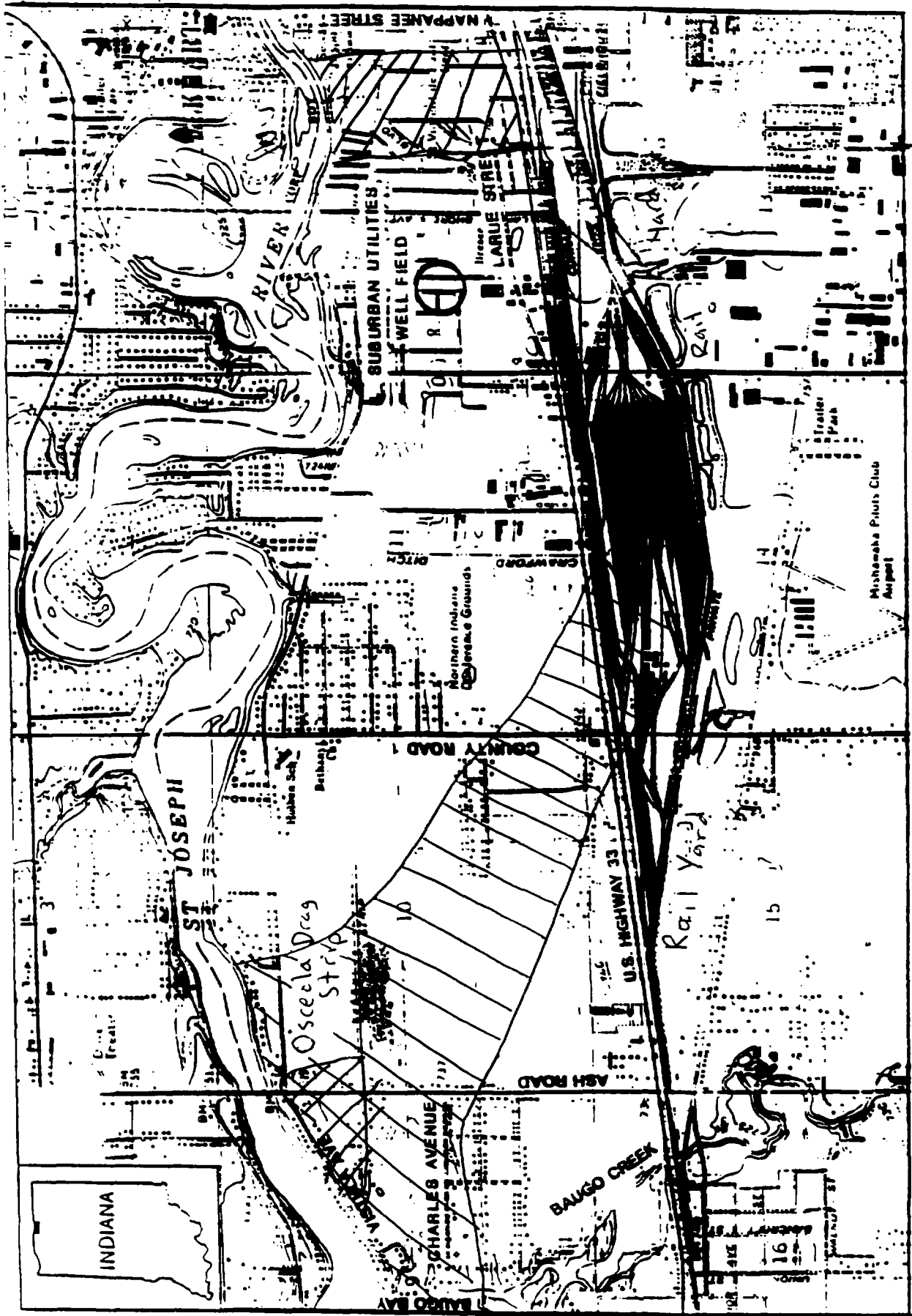
## **Attachments**

List of Documents Reviewed  
Figure 1- Site Map

**LIST OF DOCUMENTS REVIEWED  
(In Chronological Order)**

- 1. Interim Record of Decision for the Conrail Site -June 28, 1991 (EPA)**
- 2. Final Record of Decision-September 9, 1994 (EPA)**
- 3. Remedial Design/Remedial Action Consent Decree- November 10, 1997 (EPA and PRPs)**
- 4. Record of Decision Amendment -September 27, 2000 (EPA)**
- 5. Comprehensive Five-Year Review Guidance- June 2001 (EPA)**
- 6. Preliminary Close-Out Report -July 12, 2004 (EPA)**
- 7. Annual Ground Water Monitoring and Vapor Abatement System Performance Monitoring- ongoing (URS Corporation)**

# FIGURE 1



SOURCE: Ecology and Environment, Inc., 1983; BASE MAPS: USGS, Elkhart, IN Quadrangle, 7.5 Minute Series, 1981, Photorevised 1982; USGS, Osceola, IN Quadrangle, 7.5 Minute Series, 1980, Photorevised 1980.

Approximate Boundaries of La Rue Street Plume

FIGURE 1 CONRAIL SITE STUDY AREA LOCATION MAP

Approximate Boundaries of County Road 1 Plume Vernal Deposition Area